

**ABSTRACT**

The invention concerns a device for measuring the speed and direction of rotation of an object (3) near to which it is placed. It comprises :

- a magnetic detection device (2) that delivers, in response to a rotation of the object (3) generating a magnetic field variation, signals representative of its speed and its direction of rotation,
  - a conductor (4) intended to be connected to a power source to supply current to the magnetic detection device (2) at least,
  - current receptor means (6) placed between the magnetic detection device (2) and the conductor (4) that create, from signals coming from said magnetic detection device (2), a modulation of the current ( $I_{out}$ ) flowing in the conductor (4), said modulated current ( $I_{out}$ ) reflecting both the speed and the direction of rotation of the object (3).
- Application particularly in the oil industry.

Figure 1.